



Primary Care Matters

A Monthly Bulletin from Primary Care Services, Ft. Leavenworth, KS

January 2004

♦ Beware the Effects of Winter Dryness On Your Voice

Welcome to the Winter of 2004! January—February are historically the coldest months of the year in the northern hemisphere. To survive and be comfortable we heat the spaces we occupy. This obviously is necessary, but there is a downside. Warm ambient air can hold more moisture than cold air, so when cold air is heated without adding more water vapor, the relative humidity decreases and the resultant dryness makes an impact on our respiratory system.

Your nose and throat are passageways for air to go to and from your lungs. Air rushes in through these passageways delivering oxygen. Then air is blown out which carries away the carbon dioxide that the body needs to get rid of. These channels serve two other important functions: they filter and moisturize air. Tiny hairs in the nostrils help sweep out foreign particles and prevent their entry into internal organs. The mucus lining the walls of the nostrils and the throat traps and collects the rejected filtered-out material.



When you inhale air which may contain smoke, dust or other pollutants and also is very dry, the challenge to the nose and throat is intensified. The passageways, more precisely the mucosal cover lining them, serve to moisturize incoming air. The flowing air picks up moisture from the mucus by evaporation. The good news: cells in the lungs work better if they receive air with optimal relative humidity. If the mucosal cover is moist, the passageways can accomplish the task. The not so good news: if this cover isn't moist enough, air rushing through further dries out the coating in the nose and throat, leaving it more viscous or thicker. The residual mucosal material will not flow over the underlying membranes and keep them moist. Dry passageways not only are uncomfortable; they also function less effectively.



When you vocalize, i.e. you make any sound, outgoing air goes through the larynx or the vocal apparatus (what we used to call the vocal cords). If the air is dry, it picks up moisture from the surface of the larynx. This loss of moisture is NOT good because the sensitive membranes dry out. You feel the discomfort and because a dry membrane doesn't vibrate like a moist one, the vocal quality is distorted and the voice sounds hoarse. A protective coating lining all these passageways—nose, throat and larynx—crucial to comfort, vocal quality, and good health.

Some knowledgeable vocal experts believe pathogens love compromised surfaces such as a dry passageway. Bacteria which cause respiratory infections find such places quite hospitable and the surfaces of their structures, especially Streptococcus, are such that they adhere, almost like Velcro, to anyplace they can attach themselves to. Some bacteria have become increasingly resistant to antibiotic therapy and can present a treatment challenge to physicians. It's not possible to avoid these micro-organisms altogether because they are so pervasive. But they are harmless unless they thrive and invade body organs and systems.

A healthy passageway is lined with a moist mucosal coating, a physical barrier that helps prevent pathogens from gaining a foothold: the surface is smooth and "bugs" find themselves on a slippery slope. They can't stick around and multiply. There is no absolute way to avoid respiratory infections, but spraying supplemental moisture and lubrication does supplement and "repair" the physical barrier and will reduce the body's vulnerability. A couple of analogous situations where an efficient coating or barrier protects a vulnerable surface: A silicone cream rubbed onto the hands protects the skin from caustic substances. Sometimes water is the enemy. A garden tool, e.g. a shovel blade that has been cleaned and coated with a film of oil resists corrosion because the oil forms a barrier that keeps air and water away from direct contact with the metal so it doesn't oxidize or rust.



When it's cold, heating and circulating air reduces its moisture content. In hot weather, air conditioners lower the humidity. So the air we breathe, much of the time, is drier than what our bodies would prefer. Some of us may not notice, but most people can discern dryness within closed areas such as bedrooms and offices. Airplane cabins are classic.



Dry air can compromise comfort, vocal quality and vulnerability to illness. When nasal, throat and vocal apparatus tissues dry out, the nostrils and throat get an uncomfortable scratchy / itchy feeling and, because dried out membranes in the larynx do not vibrate like moist ones, the voice sounds hoarse. We sometimes call hoarseness, or any impaired vocal quality, "laryngitis", descriptive perhaps, but not necessarily a correct diagnostic term because laryngitis literally means an inflammation in the larynx.

The real world is filled with factors that can negatively impact our throat comfort and vocal quality. The environmental air we breathe, in large measure, is beyond our control. To some degree we can add moisture with humidifiers and we can filter out some of the undesirable elements, but we can't spend all of our hours in confined areas that are engineered to our specifications.

We can choose to limit vocalizing, but most of us have jobs which involve using our voice. We can learn proper technique and we can avoid abusing our voice by not shouting, speaking or singing longer or more aggressively than we should. Most important, we can drink plenty of fluids so our bodies are kept systemically hydrated. Adequate fluid intake is good for many parts of the body and for many reasons.



Many things can cause a vocal problem; dryness possibly is one of the easier ones to remedy. However, if hydration methods do not produce results in a few days or if there are signs of infection, a physician should be consulted.

Sometimes, no matter what we do, the accumulation of "vocal stressors" such as dry air, smoke, dust, and extended vocalizing produces discomfort and impaired vocal quality. When exposed to these situations, the body simply is unable to keep up with the increased demand for additional moisture and lubrication. The result is we become uncomfortable and we are hindered in our ability to do what we must do or want to do. Supplemental moisture can be very helpful.

♦ Drug Dosing Depends On Many Factors

Why did my doctor give me pills that have to be taken 4 times a day? Why couldn't I get the once-a-day stuff?

That's a good question, and one you should have asked your doctor before you left the exam room. There may be several reasons.



1. Your medicine may not be available in a long-acting form. For infections, sometimes only a certain antibiotic will work. It all depends on the type of bug, how bad the infection is, and where the infection is located in your body.
2. You might be allergic to the once-a-day stuff.
3. If a once-a-day version is available, there might be something else about your health situation that would make it unsuitable to use. Interaction with other medicines, for example, is a common reason. Bad kidneys or poor liver function are other reasons that long-acting medicines are not chosen.
4. Your infection may be unusually severe, and your doctor chose to use a higher, more frequent dosing schedule to keep pressure on the bacteria.
5. A long-acting form of your medicine may exist, but it is not available at our pharmacy. Since an equally-effective alternative is available, that has to be first choice.

In general, your medication regimen is determined by what illness or infection you have at that time. There are often many alternatives to choose from, and you should discuss them with your health care provider so you can agree on the one that best fits your situation.

I'm on a lot of medicines and it gets confusing keeping them all straight. What can I do?

If you find it difficult to stay on schedule with your medicines, we can help. There may be ways to simplify your regimen. Contact your health care provider and review your medicines in person. We can also refer you to see Munson Army Health Center's very own clinical pharmacist, Dr. Brown. She is an expert at helping people understand their medicines and simplifying their regimens.



Staff Spotlight:

MAJ (Dr.) Kelly Dawson, MD
Family Physician, Gentry Clinic

Dr. Dawson joined the staff of MAHC in September 2002. She proudly serves as a Staff Family Physician on the Purple POD at Gentry Clinic.



**USA MEDDAC, Ft. Leavenworth, KS**

MEDDAC Commander COL Margaret Rivera 684-6420

Gentry Primary Care Clinic

Chief, Primary Care Services	MAJ (P) Niel Johnson, MD	Medical Clerk Supervisor	Ms. Joan McBroom
Head Nurse	CPT Thurman Saunders, AN	Gentry Medical Clerks	Ms. Sonya Crittendon, Ms. Joyce McCool, Mr. Robert Moya, Ms. Annie Newton
NCOIC	SFC Robert Everett		SFC Brenda Sam
Asst. NCOIC	SSG Eric Taylor	Medical Records NCOIC	Ms. Margaret Reyes, Ms. Donna Smith, Mr. John Bolton, Mr. Felicito Rustique, Ms. Cynthia Moore, Ms. Rita Green, Ms. Gretchen Baker, Ms. April Jiles
Supply NCOIC	SGT(P) Tyrone McAllister	Medical Records Staff	Ms. Audrey Harris
Immunization NCOIC	SPC Jason Byers		
Immunization Medics	SPC Angela Horton, SGT Timothy Morrow		
Triage Nurse	Ms. Janice Kulild, RN		
TRIWEST Exit Clerk	Ms. Christine Starnes		
		EFMP Coordinator	

Green Pod

MAJ (Dr.) Niel Johnson • Mr. Paul Wilde, PA-C • Ms. Dana Miller, PA-C • Ms. Carolyn Anderson, RN • Ms. Candice Spath, CNA • PV2 Patricia Cowan • PFC Ross Powell

Gold Pod

MAJ Jim Sall, FNP • Dr. Gary Wilhelm, MD • Ms. Angela Clauser, RN • Ms. Jessica Johnson, CNA

Red Pod

MAJ (Dr.) Terry Simmons, MD • Dr. Catherine Silva, MD • CPT Scott Gilliam, PA-C • Ms. Angie Keller, RN • Ms. Korri Surgeon, CNA • PV2 Joseph Giaquinto • SPC McClelland

Orange Pod

Dr. Adela Ganacias, MD • Ms. Deane Kilian, PNP • MAJ Janis Guenther, RN • Ms. Laura Jordan, CNA •

Blue Pod

MAJ (Dr.) Leonard Hall, MD • Dr. Richard Bergstrand, MD • 2LT April Scott, PA • CPT Batina Sundem, RN • SGT(P) Tyrone McAllister • Ms. Marsha Florido, CNA

Purple Pod

MAJ (Dr.) Kelly Dawson, MD • MAJ (Dr.) Leonard Grado, MD • CPT (Dr.) Roger Brockbank, MD • CPT Anthony Leonard, FNP • Ms. Mary Mathia, RN • SSG Eric Taylor • Ms. Jeanine Sublett, CNA • Ms. Aliscia Alexander, LPN

☎ Important Phone Numbers ☎**Appointments**

All Monday—Friday appointments for Gentry Clinic can be booked through the TRIWEST Central Appointment Line at 1-888-TRIWEST or our local scheduling office at (913) 680-4000

For Saturday appointments call 684-6600--Option #5

All Gentry Clinic appointments, including EFMP appointments, can be booked on-line at www.munson.army.mil.**All Telephone Messages
(913) 684-6600--Option #2 or On-Line****Other Helpful Numbers (684- prefix)**

Radiology	4-6140	Specialty Clinics	4-6170	Pharmacy	4-6102
Refills	4-6500	Patient Rep (Ms. Lages)	4-6105	EFMP (Ms. Harris)	4-6681
PEBLO (Mr. Oliver)	4-4035	Allergy/Shot Clinic	4-6344	Medical Records	4-6641
Triwest Referrals	680-4000	Physical Therapy	4-6166	Mental Health	4-6771
Optometry Clinic	4-6750	OB/Gyn Clinic	4-6284	Gentry FAX #	4-6128
Dental Clinic	4-5516	Nutrition Clinic	4-6750		

🕒 Hours of Operation 🕒**Gentry Clinic**

<u>Service</u>	<u>Hours</u>	<u>Days</u>
Gentry Clinic	0730-1800	Mon — Fri
	0800-1600	Sat
Blood Pressures	0730-1730	Mon — Fri
	0800-1600	Sat
Throat Cultures	0730-1730	Mon — Fri
	0800-1530	Sat
Immunizations	0800-1730	Mon — Fri
EFMP	0800-1130	Mon — Fri

Munson Army Health Center

Optometry	0730-1530	Mon — Fri
Radiology	0730-1600	Mon — Fri
Pharmacy	0730-1630	Mon — Fri
Laboratory	0730-1630	Mon — Fri
Physical Exams	0800-1600	Mon — Fri

Primary Care Matters is a monthly bulletin provided by the Department of Primary Care Services, USA MEDDAC, Fort Leavenworth, KS. Information is current and correct at the time of the last revision. Any patient education presented is not intended to replace an evaluation by a competent medical provider, but rather to supplement the treatment plan outlined by the patient's health care provider. Moreover, much of the information is intended to be of a general nature and it cannot be assumed that such information will necessarily apply to specific individuals. Opinions and facts do not necessarily reflect that of the United States Government or its subordinate agencies. Questions, comments and corrections should be forwarded to the Chief, Primary Care Services, MAJ (P) Niel Johnson, MD, FAAFP.